

ABSTRACT

This idea represents a method for incorporation of a therapeutic molecule, preferably a protein or a growth factor, into a biodegradable scaffold, specifically one that is made of a foam nonwoven composite. The process utilizes a solvent preferably tertiary butanol to facilitate the infiltration of the particles of the therapeutic agent into the porous matrix of the scaffold. In the case of small molecules, such as a p38 kinase inhibitor, the drug is dissolved directly in sterile filtered t-butanol and a given amount is pipetted aseptically onto the pre-sterilized scaffold. The solution is readily adsorbed into the polymer matrix. The solution is readily frozen to allow minimal interaction with the polymer scaffold thereby protecting the scaffold's internal matrix. The solvent is then aseptically removed by lyophilization.